

**REMARKS**

Claims 1 and 3-56 are pending in this application. Claims 20-56 are presently Withdrawn-Currently Amended. By this Amendment, claims 1, 5 and 6 are amended in response to the rejection under 35 U.S.C. §112, second paragraph. Withdrawn claim 20 is amended for rejoinder. Claims 1 and 3-56 are amended to replace the term "characterized" to address the objection. Claim 1 is also amended to more fully define the cross-linked structure over the teachings of Lavin. Support for amended claims 5 and 6 may be found in the original specification at, for example, page 9, lines 4-6. Support for amended claim 1 may be found in the original specification at, for example, page 11, line 21 to page 12, line 6, page 15, line 3-10 and page 43, line 1 to page 52, Table 2. No new matter is added.

Applicants appreciate the courtesies shown to Applicants' representatives by Examiner Miller and Examiner Hendricks in the March 5, 2008 interview. Applicants' separate record of the substance of the interview is incorporated into the following remarks.

Entry of the amendments is proper under 37 CFR §1.116 because the amendments: (a) place the application in condition for allowance (for the reasons discussed herein); (b) do not raise any new issue requiring further search and/or consideration (as the amendments amplify issues previously discussed throughout prosecution); (c) satisfy a requirement of form asserted in the previous Office Action; (d) do not present any additional claims without canceling a corresponding number of finally rejected claims; and (e) place the application in better form for appeal, should an appeal be necessary. The amendments are necessary and were not earlier presented because they are made in response to arguments raised in the final rejection. Entry of the amendments is thus respectfully requested.

Reconsideration of the Application is respectfully requested.

**Claim Objection**

Claim 1 was objected to for including the term "characterized."

Claim 1 is amended to replace the phrase "characterized in that" with "wherein."

Similarly, claims 3-56 have been amended to recite "wherein" instead of "characterize in that" where appropriate. As such, withdrawal of the objection to claim 1 is respectfully requested.

**Rejections Under 35 U.S.C. §112, Second Paragraph**

**Claim 1**

Claim 1 was rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite. In particular, the Patent Office alleged that the phrase "in accordance with" in the feature "a carrier is transported in accordance with the voltage applied to the electrodes" is unclear as to how something is done "in accordance with" the voltage.

Claim 1 is amended to recite "a carrier is transported ~~in accordance with~~when the voltage is applied to the electrodes" and thus to replace the phrase "in accordance with."

As such, with respect to claim 1, reconsideration and withdrawal of the rejection under 35 U.S.C. §112, second paragraph, are respectfully requested.

**Claims 5 and 6**

Claims 5 and 6 were rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite. In particular, the Patent Office alleges that it is unclear as to what the term "mainly" means in claims 5 and 6.

Claims 5 and 6 are amended to further define the term "mainly." In particular, the phrase "comprise mainly single-wall carbon nanotubes" is replaced with "comprise more single-wall carbon nanotubes than multi-wall carbon nanotubes" in claim 5 and the phrase "comprise mainly multi-wall carbon nanotubes" is replaced with "comprise more multi-wall carbon nanotubes than single-wall carbon nanotubes" in claim 6. See page 9, lines 4-6 of the original specification.

As such, with respect to claims 5 and 6, reconsideration and withdrawal of the rejection under 35 U.S.C. §112, second paragraph, are respectfully requested.

**Rejection Under 35 U.S.C. §103(a)**

Claims 1-19 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 7,282,742 ("Tsukamoto") in view of U.S. Patent No. 6,426,134 ("Lavin"). Applicants respectfully traverse this rejection.

None of the applied references, alone or in combination, teach or suggest an electronic device including three or more electrodes and a transporting layer constituted by a carbon nanotube structure formed into a network structure by a plurality of carbon nanotubes and cross-linked sites on the carbon nanotubes, wherein the cross-linked sites connect the carbon nanotubes with each other by chemical bonding between the different carbon nanotubes, in which a carrier is transported when a voltage is applied to the electrodes, as recited in claim 1.

The Patent Office concedes that Tsukamoto fails to disclose cross-linking sites formed from carbon nanotubes, and relies on Lavin as allegedly disclosing this feature. Applicants respectfully disagree.

The Patent Office alleges that Lavin discloses a carbon nanotube having at least one end chemically bonded to a polymer, with the nanotube and polymer being cross-linked. However, even if it is accepted that the polymer and nanotube described in Lavin are cross-linked, this teaching still falls short from what is claimed. Claim 1 requires cross-linking between nanotubes, instead of cross-linking between a single nanotube and a polymer. Nowhere does Lavin teach or suggest a nanotube structure in which the nanotubes are cross-linked with each other.

Further, Lavin merely discloses a composition and method for making a nanotube, not nanotubes forming a transporting layer or the cross-linking of such nanotubes with each other.

As such, Lavin fails to teach or suggest nanotubes cross-linked with other nanotubes and/or the advantages achieved from such structure.

For at least the foregoing reasons, claim 1, and dependent claims therefrom, are patentable over the applied references. Reconsideration and withdrawal of the rejection under 35 U.S.C. §103(a) are respectfully requested.

**Rejoinder**

Claims 20-56 are presently withdrawn. However, pursuant to MPEP §821.04, because the withdrawn claims include all of the features of claim 1, Applicants respectfully request that upon allowance of the elected claims, claims 20-56 should be rejoined and similarly allowed.

**Conclusion**

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1 and 3-56 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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